

## A NEW SPECIES OF POLYCESTA (BUPRESTIDAE)

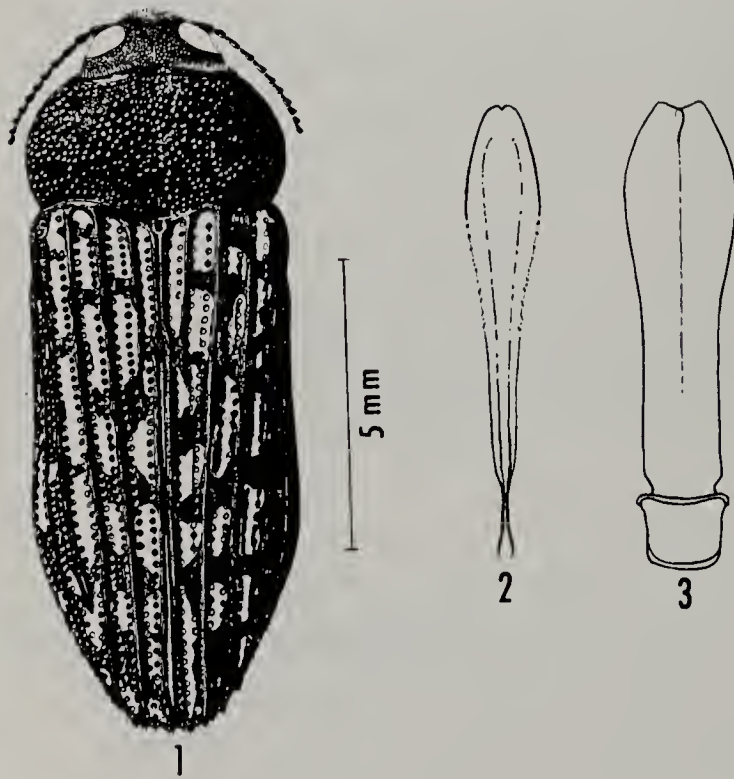
By G. H. NELSON<sup>1</sup>

While cutting into dead limbs of *Quercus dumosa* Nuttall near Pinyon Flats in Riverside County, California during the summer of 1959 the following striking new species of *Polycesta* was discovered.

### *Polycesta flavomaculata*, NEW SPECIES

(figs. 1-3).

Medium sized, moderately slender but with lateral margins of elytra tapering abruptly toward apices; feebly shining, head and under surface bronzy black, pronotum and elytra black with slight bluish tinge, elytra



FIGURES 1-3. *Polycesta flavomaculata*, n. sp., dorsal views. FIG. 1. Adult male. FIG. 2. Male genitalia, median lobe. FIG. 3. Male genitalia, lateral lobes.

with profuse yellow maculations; scutellar costae distinct; third and fourth tarsal segments with membranous lobes beneath.

**MALE:** Head with front moderately concave, densely punctured with rather coarse punctures on front and moderately clothed with fine erect and suberect silvery hairs, punctures smaller behind eyes and on occiput, the latter sparsely punctured medially with a hairline median sulcus extending from base forward to between upper extent of eyes; clypeus with front margin shallowly arcuately emarginate, front angles obtusely rounded; antennae extremely long and slender, reaching to behind front coxal cavities.

Pronotal width to length of ratio of 1.6 to 1; front narrower than base; lateral margins broadly rounded, widest behind middle; anterior margin feebly lobed at middle; posterior

<sup>1</sup> Department of Anatomy, College of Medical Evangelists, Loma Linda, California.

margin bisinuate; surface moderately punctured on disk, punctures larger and more dense laterally; disk with a feeble median depression extending from base to near anterior margin, a smooth median sulcus at basal fourth; surface of disk between punctures opaque, more shining anteriorly and laterally.

Scutellum elongate, oval, convex, surface nearly smooth, shining.

Elytra very slightly wider than pronotum and slightly less than four times longer; humeri moderately developed, humeral angles obtuse; side margins slightly expanded behind base, then feebly sinuate to widest place at beginning of apical third and arcuately tapering to apices; apical fourth of lateral margin irregularly spinose; sutural costae distinct, divergent just before junction of basal and middle thirds, then parallel to apical fourth where they are slightly divergent and then convergent at apices; elytra expanded medially from sutural costae to overlap each other throughout most of length; scutellar costae distinct, extending to middle third of elytra; interstitial spaces two and four costate and entire; interstitial spaces six and eight costate, both obliterated basally in humeral prominence, sixth terminated at apical fourth, eighth extended to apex; interstitial spaces with small sparse punctures; each stria with a single row of close set, large, shallow punctures; surface of elytra with a few fine, short, silvery hairs laterally and at apex.

Under surface densely, rather finely, shallowly punctured, punctures less dense medially on metasternum and abdomen, moderately clothed with short, suberect silvery hairs; anterior margin of prosternum arcuate anteriorly at sides, arcuate posteriorly at middle; disk of first abdominal sternite swollen, hind margin broadly lobed at middle; hind margin of second abdominal sternite feebly sinuate, of third feebly arcuate anteriorly, of fourth straight; hind margins of second, third and fourth abdominal sternites slightly prolonged at sides; last abdominal sternite broadly triangular, hind margin arcuate, slightly prolonged toward tip and concavely truncate at tip; third tarsal joint with a moderately developed membranous lobe beneath, fourth joint inconspicuous except for broad membranous lobe beneath.

The male genitalia (figs. 2, 3) are distinctive. Median lobe with lateral plate-like structures greatly reduced. Lateral lobes with obliquely truncated apices.

Length: 12.3 mm.; Width: 4.2 mm.

**FEMALE:** Differs from male in being larger, yellow maculations relatively reduced in size, disk of first abdominal sternite flattened at middle; hind margin of first abdominal sternite arcuate forward at middle; hind margin of second abdominal sternite feebly so; hind margin of last abdominal sternite not prolonged at apex and very faintly arcuately truncate.

Length: 18.5 mm. Width: 6.6 mm.

Type material: Holotype, male (California Academy of Sciences, Entomology, San Francisco), allotype, female (writer's collection), sixteen male and nineteen female paratypes from 2.5 miles north of Pinyon Flats Public Camp, Highway 74, San Jacinto Mountains, Riverside County, California, June 30 to July 20, 1959, collected by George Walters and the writer. The holotype was collected on July 2 and the allotype on July 6. Paratypes in the following collections: California Academy of Sciences, W. F. Barr, George Walters, R. L. Schultz and the writer.

Host: The entire series was either cut or reared from partly dead trees of *Quercus dumosa* Nuttall.

Because of its distinctive yellow maculations *Polycesta flavomaculata* is easily separated from other species of *Polycesta*. An examination of morphological characteristics reveals that *P. flavomaculata* does not readily fit into any of the three groups of *Polycesta* as proposed by Barr '49, but exhibits characteristics of both the *arizonica* and *elata* groups. Characteristics which *P. flavomaculata* has in common with the *arizonica* group are: pronotal sculpturing, scutellar costae and lobed third and fourth tarsal segments. Those it has in common with the *elata* group are: elytral shape and swollen first abdominal sternite of the male. The males range from 9.8 to 13.5 mm. in length and from 3.5 to 4.8 mm. in width; the females from 14.3 to 20.3 mm. in length and from 5.3 to 7.4 mm. in width.

#### LITERATURE CITED

- BARR, W. F. 1949. A revision of the species of the genus *Polycesta* occurring in the United States. American Mus. Nov. No. 1432: 1-42.